



PATENT / DOCKET NO.: 24061.188 /TSMC2003-1374  
CUSTOMER NO. 27683

HB

**INVENTOR'S DECLARATION FOR  
PATENT APPLICATION**

As below named inventor, I hereby declare that:

Our residence, post office address and citizenship are as stated below next to our names;

I believe I are the original, first and sole joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled

**A MRAM DEVICE HAVING LOW K-INTER-METAL DIELECTRIC**

the specification of which: (check one)

  X   is attached hereto.

           was filed on  
under Attorney's Docket Number  
as Application Serial No.  
and was amended on                                      (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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FULL NAME OF INVENTOR: Chun-Chien Lin

INVENTOR'S SIGNATURE: Chun-Chieh Lin

DATED: Apr 12, 2004

RESIDENCE:

Hsin-Chu, Taiwan 300, R.O.C.  
Citizenship: Taiwan, R.O.C.

PATENT / DOCKET NO.: 24061.188 /TSMC2003-1374  
CUSTOMER NO. 27683

POST OFFICE ADDRESS:

Hsin-Chu, Taiwan 300, R.O.C.  
Citizenship: Taiwan, R.O.C.

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Docket No. 24061.188 (TSMC2003-1374)  
Customer No. 42717

UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Chun-Chieh Lin	§	
	§	Docket Number: 24061.188
Serial No.: 10/816,730	§	(TSMC2003-1374)
	§	
Filed: April 2, 2004	§	Examiner: To Be Determined
	§	
For: MRAM Device Having Low-K Inter-Metal Dielectric	§	Art Unit: 2818
	§	
	§	Conf. No.: 1025

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL SHEET TO POWER OF ATTORNEY**

In accordance with 37 CFR 1.32 (c)(3) and with reference to the accompanying Power of Attorney, please recognize the following ten patent practitioners as being of record in this application.

Name	Registration Number
Jeffrey M. Becker	35,442
Timothy F. Bliss	50,925
Andrew S. Ehmke	50,271
Dave R. Hofman	55,272
Wei Wei Jeang	33,305
Julie M. Nickols	50,826
J. Andrew Lowes	40,706
David M. O'Dell	42,044
T. Murray Smith	30,222
Chien Wei Chou	41,672

Respectfully submitted,

David M. O'Dell  
Registration No. 42,044

Dated: 7-19-04

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**Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Bonnie Boyle  
Name

7-19-04  
Date



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	§	Attorney Docket No.:	24061.188
Chun-Chieh Lin	§		TSMC2003-1374
	§		
Serial No.: Unknown	§	Customer No. 27683	
	§		
Filed: Herewith	§	Group Art Unit: Unknown	
	§		
For: A MRAM DEVICE HAVING LOW K	§	Examiner: Unknown	
INTER-METAL DIELECTRIC	§		

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

POWER OF ATTORNEY FOR PATENT APPLICATION

As a representative of the Assignee, Taiwan Semiconductor Manufacturing Company, Ltd., I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

David L. McCombs (Reg. No. 32,271); Jeffrey M. Becker (Reg. No. 35,442); James R. Bell (Reg. No. 26,528); Timothy F. Bliss (Reg. No. 50,925); Randall C. Brown (Reg. No. 31,213); Randall E. Colson (Reg. No. 40,566); Michael A. Davis, Jr. (Reg. No. 35,488); Andrew S. Ehmke (Reg. No. 50,271); Priscilla Ferguson (Reg. No. 42,531); Sarah T. Harris (Reg. No. 35,891); William E. Hickman (Reg. No. 46,771); Rita M. Irani (Reg. No. 31,028); Warren B. Kice (Reg. No. 22,732); J. Andrew Lowes (Reg. No. 40,706); Todd Mattingly (Reg. No. 40,298); John Montgomery (Reg. No. 31,124); Julie Nickols (Reg. No. 50,826); Gloria Norberg (Reg. No. 36,706); David M. O'Dell (Reg. No. 42,044); Richard V. Wells (Reg. No. 53,757); and Chien Wei Chou (Reg. No. 41,672).

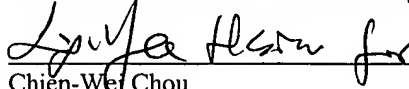
Please address all correspondence and telephone calls regarding this application to:

David M. O'Dell  
Attorney for Applicants  
Haynes and Boone, LLP  
901 Main Street, Suite 3100  
Dallas, TX 75202-3789  
972-739-8635 / 214-200-0853 - Fax

The undersigned is the representative for the Assignee of the entire right, title, and interest in the patent application identified above. A copy of the assignment or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is authorized to act on behalf of the Assignee.

Taiwan Semiconductor Manufacturing Company, Ltd.



Chien-Wei Chou  
Title: Director, IP Division

Date

## ASSIGNMENT

WHEREAS, I

Chun-Chieh Lin

of

Hsin-Chu, Taiwan 300, R.O.C.  
Taiwan, R.O.C.

has invented certain improvements in

### A MRAM DEVICE HAVING LOW K INTER-METAL DIELECTRIC

for which we have executed an application for Letters Patent of the United States of America, filed April 2, 2004 and assigned application no. 10/816,730; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and I hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

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First Inventor Name: Chun-Chien Lin  
Residence Address: Hsin-Chu, Taiwan 300, R.O.C.  
Taiwan, R.O.C.

Dated: Apr 12, 2004

Chun-Chieh Lin  
Inventor Signature

Dated: Apr 12, 2004

Ta-Wei Wang  
Witness Signature  
Witness Name: \_\_\_\_\_

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